

AMENDMENTS TO THE CLAIMS

Please cancel Claims 15, 21-38 and 53 without prejudice or disclaimer of the subject matter. Please add Claims 110-112 and amend Claims 1, 17, 39, 41, 43-45, 55, 59, 61, 73 and 75 as follows.

1. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:
 - a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under the vacuum atmosphere;
 - b: carrying said second substrate ~~one~~ or both of said first and second substrates into a getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to getter processing by flashing an evaporation type getter to a surface of said second substrate at which the phosphors are disposed, thereby forming a getter film on the surface of said second substrate at which the phosphors are disposed ~~said one substrate carried, or one or both of said substrates carried;~~ and
 - c: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

2. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line.

3. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line, and a heat shielding member is disposed between said getter processing chamber and said seal processing chamber.

4. (Original) A method of manufacturing an image displaying apparatus according to claim 3, wherein said heat shielding member is formed of reflective metal.

5. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line, and a load lock is disposed between said getter processing chamber and said seal processing chamber.

6. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on a star arrangement.

7. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on a star arrangement, and said getter processing chamber and said seal processing chamber are partitioned by an independent chamber.

8. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said phosphor exciting means has electron beam emitting means.

9. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

10. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

11. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

12. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

13. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

14. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

15. (Cancelled).

16. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said evaporation type getter is a barium getter.

17. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 1, wherein ~~said~~ a sealing material used in the ~~the~~ said step c is a low melting point material.

18. (Original) A method of manufacturing an image displaying apparatus according to claim 17, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

19. (Original) A method of manufacturing an image displaying apparatus according to claim 18, wherein said low melting point metal is indium or an alloy of indium.

20. (Original) A method of manufacturing an image displaying apparatus according to claim 17, wherein said low melting point material is frit glass.

21-38. (Cancelled).

39. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:

a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is provided under the vacuum atmosphere;

b: carrying said first and second substrates into a bake processing chamber in the vacuum atmosphere under the vacuum atmosphere and subjecting to bake processing both said substrates at predetermined temperature;

c: carrying said second substrate ~~one~~ or both of said first and second substrates into a getter processing chamber in the vacuum atmosphere under the vacuum

atmosphere, and subjecting to getter processing by flashing an evaporation type getter to a surface of said second substrate at which the phosphors are disposed, thereby forming a getter film on the surface of said second substrate at which the phosphors are disposed ~~said one substrate carried or one or both of said substrates carried;~~ and

d: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

40. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said steps a, b, c and d are steps set on one line.

41. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 39, wherein the said steps a, b, c and d are steps set on one line, and a heat shielding member is disposed between said bake processing chamber and said getter processing chamber, between said bake processing chamber and said seal processing chamber, or between said bake processing chamber, said getter processing chamber and said seal processing chamber, respectively.

42. (Original) A method of manufacturing an image displaying apparatus according to claim 41, wherein said heat shielding member is formed of a reflective metal.

43. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 39, wherein ~~the~~ said steps a, b, c and d are steps set on one line, and a load lock is disposed between said bake processing chamber and said getter processing chamber, between said bake processing chamber and said seal processing chamber, or between said bake processing chamber, said getter processing chamber and said seal processing chamber, respectively.

44. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 39, wherein ~~the~~ said steps a, b, c and d are steps set on a star arrangement.

45. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 39, wherein the steps a, b, c and d are arranged on a star arrangement, and said bake processing chamber[,] and said getter processing chamber,said getter processing chamber and said seal processing chamber,or said bake processing chamber and said seal processing chamber, are partitioned by an independent chamber.

46. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said phosphor exciting means has electron beam emitting means.

47. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

48. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

49. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

50. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

51. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

52. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

53. (Cancelled).

54. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said evaporation type getter is a barium getter.

55. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 39, wherein ~~said~~ a sealing material used in the step c is a low melting point material.

56. (Original) A method of manufacturing an image displaying apparatus according to claim 55, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

57. (Original) A method of manufacturing an image displaying apparatus according to claim 56, wherein said low melting point metal is indium or an alloy of indium.

58. (Original) A method of manufacturing an image displaying apparatus according to claim 55, wherein said low melting point material is frit glass.

59. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:

a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under the vacuum atmosphere;

b: carrying said first and second substrates into a bake processing chamber in the vacuum atmosphere under the vacuum atmosphere and subjecting to bake processing both said substrates at predetermined temperature;

c: carrying one or both of said first and second substrates into a first getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to first getter processing said one substrate carried or one or both of said substrates carried;

d: carrying one or both of said first and second substrates into an electron beam clean processing chamber in the vacuum atmosphere under the vacuum

atmosphere, and subjecting to electron beam clean processing said one substrate carried or one or both of said substrates carried;

e: carrying said second substrate ~~one~~ or both of said first and second substrates into a second getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to second getter processing by flashing an evaporation type getter to a surface of said second substrate at which the phosphors are disposed, thereby forming a getter film on the surface of said second substrate at which the phosphors are disposed ~~said one substrate carried or one or both of said substrates carried;~~ and

f: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

60. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said steps a, b, c, d, e and f are steps set on one line.

61. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 59, wherein ~~the~~ said steps a, b, c, d, e and f are steps set on one line, and a heat shielding member is disposed between said bake processing chamber and said first getter processing chamber, between said first getter

processing chamber and said electron beam clean processing chamber, between said electron beam clean processing chamber and said second getter processing chamber, or between said second getter processing chamber and said seal processing chamber.

62. (Original) A method of manufacturing an image displaying apparatus according to claim 61, wherein said heat shielding member is formed of a reflective metal.

63. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are steps set on one line, and a load lock is disposed between said bake processing chamber and said first getter processing chamber, between said first getter processing chamber and said electron beam clean processing chamber, between said electron beam clean processing chamber and said second getter processing chamber, or between said second getter processing chamber and said seal processing chamber.

64. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are set on a star arrangement.

65. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are set on a star

arrangement, and said bake processing chamber, said first getter processing chamber, said electron beam clean processing chamber, said second getter processing chamber and said seal processing chamber are partitioned by independent chambers.

66. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said phosphor exciting means has electron beam emitting means.

67. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

68. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

69. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

70. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

71. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

72. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

73. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 59, wherein said getter used in the ~~steps b~~ step b ~~and d~~ is an evaporation type getter.

74. (Original) A method of manufacturing an image displaying apparatus according to claim 73, wherein said evaporation type getter is a barium getter.

75. (Currently Amended) A method of manufacturing an image displaying apparatus according to claim 59, wherein ~~said~~ a sealing material used in the step ~~[[e]]~~ f is a low melting point material.

76. (Original) A method of manufacturing an image displaying apparatus according to claim 75, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

77. (Original) A method of manufacturing an image displaying apparatus according to claim 76, wherein said low melting point metal is indium or an alloy of indium.

78. (Original) A method of manufacturing an image displaying apparatus according to claim 75, wherein said low melting point material is frit glass.

79 - 109. (Cancelled).

110. (New) A method of manufacturing an image displaying apparatus, comprising the steps of:

a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under a vacuum atmosphere;

b: carrying under a vacuum atmosphere said first and second substrates into a bake processing chamber of which atmosphere is evacuated to subject both of said first and second substrates to a bake processing at a predetermined temperature;

c: carrying under a vacuum atmosphere one or both of said first and second substrates into a cleaning processing chamber of which atmosphere is evacuated, to subject one or both of the substrates carried therein to a cleaning processing;

d: carrying under the vacuum atmosphere said second substrate or both of said first and second substrates into a second getter processing chamber, and subjecting the substrate or substrates carried therein to a second getter processing by flashing an evaporation type getter to a surface of said second substrate on which the phosphor is disposed, thereby forming a getter film on the surface of said second substrate on which the phosphor is disposed: and

e: carrying under the vacuum atmosphere said first and second substrates into a sealing processing chamber of which atmosphere is evacuated, and heat sealing said first and second substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

111. (New) A method of manufacturing an image displaying apparatus according to claim 110, wherein said cleaning processing includes a process of an electron beam irradiation onto the one substrate carried therein or one or both of the substrates carried therein.

112. (New) A method of manufacturing an image displaying apparatus according to claim 110, wherein said cleaning processing includes an electron beam irradiation onto the surface of said second substrate on which the phosphor is disposed.